



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/010,270

12/06/2001

Harold J. Plourde JR.

A-7182

5626

5642 7590 07/26/2006

SCIENTIFIC-ATLANTA, INC.
INTELLECTUAL PROPERTY DEPARTMENT
5030 SUGARLOAF PARKWAY
LAWRENCEVILLE, GA 30044

EXAMINER

WILDER, PETER C

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,270

Applicant(s)

PLOURDE ET AL.

Examiner

Peter C. Wilder

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Note to Applicant

Art Units 2611, 2614 and 2617 have changed to 2623. Please make all future correspondence indicate the new designation 2623.

Claims 1-46 are original.

Response to Arguments

To advance prosecution the previous action filed on 5/08/2006 is withdrawn and a new action is filed with new grounds of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14, 18-22, 24-37, 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. (WO 92/22983) in view of Sanna et al. (Using Windows NT Workstation 4.0).

Referring to claim 1, Browne teaches a system for managing the allocation and storage of media content instance files in a hard disk of a storage device coupled to a media client device in a subscriber television system, comprising:

a memory for storing logic (Page 14 lines 7-8 teaches a controller element 105 in Figure 1 having memory and Page 18 lines 1-6 and Figure 2-11 teaches the controller operating the remote device which would have to be done with a program or logic of some kind);

a buffer space in the hard disk for buffering media content instances as buffered media content instance files (Page 20 last paragraph);

and a processor (Page 13 third paragraph) configured with the logic to track the size of permanent media content instance files and the buffered media content instance files (Page 7-8 and Page 24 last two lines and page 25 first two lines and Figure 6 upper right hand corner teach an indication of free space in storage section 104 and Page 7 last paragraph teaches a FIFO buffer element 104c being implemented and programs that are retained are moved to storage 104, so the available free space is separate from the buffer space).

Browne fails to teach providing and indication of available free space, such that the indication is independent of the buffer space.

In an analogous art Sanna teaches providing and indication of available free space, such that the indication is independent of the buffer space (Page 131 under configuring Hard Disk teaches Disk 2 in Figure 4.1 is a new physical hard drive; Page 136 Figure 4.11 teaches Disk 2 has been partitioned to have three drives E:, G:, and H:; On page 130 and 131 Figures 4.2 and 4.3 it teaches being able to determine the available free space of one drive independent of another drive).

At the time the invention was made it would have been obvious for one skilled in the art to modify the independent buffer space in the television system of Browne with the independent free space tracking system of Sanna for the purpose of using a well known concept in software to let the user know how much free space is available for recording programs.

Referring to claim 2, depending on claim 1, Browne teaches the system, wherein the processor is further configured with the logic to provide a user interface (Page 13 third paragraph teaches Figures 2-11 as user interfaces), responsive to a user input (Page 13 third paragraph teaches a user control section and to control you need user input), wherein the user interface provides the indication of available free space for permanently recording media content instances (Figure 6 upper right hand corner), wherein the permanently recorded media content instances are configured as the permanently recorded media content instance files (Page 24 last paragraph and page 25 lines 1-2 teaches element 600 in Figure 6 which shows individual programs stored in element 104 which would be files in memory 104).

Referring to claim 3, depending on claim 2, Browne teaches wherein the permanently recorded media content instance files can be deleted from the storage device (Page 25 lines 3-6).

Referring to claim 4, depending on claim 2, Browne teaches the system, wherein the user input is implemented with a remote control device (Page 18 lines 1-4 teaches a remote control).

Referring to claim 5, depending on claim 2, Browne teaches the system wherein the permanently recorded media content is from the buffer space (Last paragraph starting on page 7 going onto page 8).

Referring to claim 6, depending on claim 2, Browne teaches the system of claim 2, wherein the permanently recorded media content is a scheduled recording initially written to non-buffer space (Page 24 second and third paragraphs teach setting up a recording and the recorded program being stored in section 104 which is a non-buffer space)

Referring to claim 7, depending on claim 1, Browne teaches the system of claim 1, wherein the buffer space, the available free space, and permanently recorded space are located on the hard disk (Page 10 last paragraph and page 11 teach magnetic disks/hard disks storing data for storage section 104, Page 20 last paragraph teaches a buffer space being allocated from storage section 104, and Page 24 last two lines and Page 25 first two lines teach the free space in storage area 104).

Referring to claim 8, depending on claim 1, Browne teaches the system wherein the buffer space and permanently recorded space are allocated from the free space on the hard disk (Page 20 last paragraph and page 21 and Figure 3 teach the buffer space being allocated from the general storage on 104, Page 24 third paragraph teaches storing recorded programs in section 104, and Page 24 last two lines and Page 25 first two lines teach the free space in storage area 104, so the permanently recorded area is allocated for free space).

Referring to claim 9, depending on claim 1, Browne teaches the system of wherein the buffer space and permanently recorded space have physical locations on the hard disk (Last paragraph on page 20 teaches a buffer being a portion of storage section 104 (from page 7 fourth paragraph the buffer known as 104c), and page 24 third paragraph teaches permanently recorded programs being part of storage section 104 and page 11 lines 2-3 teaches a magnetic disk comprising storage section 104 so the buffer section 104c thus physical locations have to exist for the buffer and permanently recorded spaces)

Referring to claim 10, depending on claim 1, Browne teaches the system, wherein the buffer space and the available free space is measured in units of time (Page 8 lines 6-8 teaches programs that are stored as permanently are added to program list 600 out of buffer 104c and Page 24 last two lines and page 25 lines 1-2

and Figure 6 upper left corner teach the available free space in time as part of storage unit 104 in terms of non-buffer space since the programs in 104 are listed in program list 600, Page 20 last paragraph and page 21 along with Figure 3 element 305b teach the buffer space allocation in time units).

Referring to claim 11, depending on claim 1, it is the system of Browne, wherein the buffer space and the available free space is measured in units of hard disk space (Page 24 last two lines and Page 25 first two lines and Figure 6 upper right corner teaches measuring the available free space in units of time which is a unit of hard disk space; Figure 3 element 305b and Pages 20 and 21 teach the user allocated 2 hours/units of hard disk space for the buffer; the claim does not recite the units have to be in bites or bytes).

Referring to claim 12, depending on claim 1, Browne the system of wherein the processor is further configured with the logic to buffer analog broadcast media content instances, received at a communications interface, as digitally compressed media content instances (Page 10 lines 8-18 teaches receiving an analog signal converting it to digital and compressing the digital signal, Page 10 last paragraph teaches storing the compressed data in storage section 104, and Page 20 last paragraph teaches that storage section 104 can have a portion of the storage area act as a FIFO buffer; Page

Art Unit: 2623

18 first paragraph teaches a microprocessor element 105 controlling the recorder player and controlling the program source, channel, and recording time which mean the user can control what is buffered through the processor so the processor has to have logic in order to function).

Referring to claim 13, depending on claim 1, Browne teaches the system of wherein the processor is further configured with the logic to buffer an analog signal received at a connector from a consumer electronics device, as a digitally compressed media content instance (Page 10 lines 8-18 teaches receiving an analog signal converting it to digital and compressing the digital signal, Page 10 last paragraph teaches storing the compressed data in storage section 104, and Page 20 last paragraph teaches that storage section 104 can have a portion of the storage area act as a FIFO buffer; Page 18 first paragraph teaches a microprocessor element 105 controlling the recorder player and controlling the program source, channel, and recording time which mean the user can control what is buffered through the processor so the processor has to have logic in order to function; Page 9 second paragraph teaches a input signal can come from a VCR).

Referring to claim 14, depending on claim 1, Browne the system of wherein the processor is further configured with the logic to buffer digital broadcast media content instances, received at a communications interface, as digitally compressed media

content instances (Page 11 second paragraph teaches receiving pre-compressed digital data and storing the compressed data in storage section 104, and Page 20 last paragraph teaches that storage section 104 can have a portion of the storage area act as a FIFO buffer; Page 18 first paragraph teaches a microprocessor element 105 controlling the recorder player and controlling the program source, channel, and recording time which mean the user can control what is buffered through the processor so the processor has to have logic in order to function).

Referring to claim 18, depending on claim 1, Browne teaches the system wherein the processor is further configured with the logic to determine the available free space after subtracting buffer space capacity from total disk space (Figure 6 upper left hand corner displays the space left in storage unit 104, Page 20 last paragraph teaches allocating a fixed portion of storage area 104 for a FIFO buffer, Page 8 lines 6-8 teach the FIFO buffer 104c being considered separate from storage area 104 and storage area 104 being represented by a list 600, Page 24 last two lines and page 25 first two lines teaches displaying the amount of free space in storage area 104 with regards to list 600, Page 13 third paragraph teaches a processor controlling recorder player 100).

Referring to claim 19, depending on claim 1 Browne teaches the system of wherein the processor is configured with the logic to reduce the available free space by the amount of the space used for the permanent media content instance files (Page 24 last two lines and page 25 first two lines and first paragraph on teaches displaying the

remaining space in storage section 104 with regards to list 600 and the processor element 105 updating the list 600 when a program is removed so the available free space in section 104 would be updated with a space increase, a space decrease would occur if a program were added).

Referring to claim 20, depending on claim 1, Browne teaches the system of wherein the processor is configured with the logic to increase the available free space by the amount of the space recovered from a deleted permanent media content instance files (Page 24 last two lines and page 25 first two lines and first paragraph on teaches displaying the remaining space in storage section 104 with regards to list 600 and the processor element 105 updating the list 600 when a program is removed so the available free space in section 104 would be updated with a space increase).

Referring to claim 21, depending on claim 1, Browne the system of wherein the indication of the free space available is configured in time of space available for the permanent media content instance files (Page 24 last two lines and page 25 first two lines and Figure 6 upper right hand corner teaches displaying the remaining space in storage section 104 with regards to list 600 in units of time).

Referring to claim 22, depending on claim 1, Browne teaches the system, wherein the free space indication is unaffected by writes to and deletions from the buffer

space (Page 7 fourth paragraph teaches a FIFO buffer element 104c which is part of element 104 but a separate allocation, and Figure 3 element 305 teaches the portion of the total hard drive space being used for buffer space; Page 8 lines 6-8 teaches storage section 104 being separate from the FIFO buffer element 104c and section 104 is related to program list 600, Page 24 last two lines and page 25 lines 1-2 teach indicating the space left in storage section 104, Since the FIFO buffer 104c is separate from the storage area 104 then the writes and deletions in a FIFO buffer will not effect the free space indication).

Referring to claim 24, Browne teaches a method for managing the allocation and storage of media content instance files in a hard disk of a storage device coupled to a media client device in a subscriber television system, comprising the steps of:

buffering media content instances into buffer space as buffered media content instance files (Page 7 and 8 and Page 20 last paragraph);

tracking the size of permanent media content instance files and buffered media content instance files (Figure 6 and Pages 7-8 and 24-25); and

providing an indication of available free space (Page 24 last paragraph to top of page 25 and Figure 6).

Browne fails to teach providing and indication of available free space, such that the indication is independent of the buffer space.

In an analogous art Sanna teaches providing and indication of available free space, such that the indication is independent of the buffer space (Page 131 under

Art Unit: 2623

configuring Hard Disk teaches Disk 2 in Figure 4.1 is a new physical hard drive; Page 136 Figure 4.11 teaches Disk 2 has been partitioned to have three drives E:, G:, and H:; On page 130 and 131 Figures 4.2 and 4.3 it teaches being able to determine the available free space of one drive independent of another drive).

At the time the invention was made it would have been obvious for one skilled in the art to modify the independent buffer space in the television method of Browne with the independent free space tracking method of Sanna for the purpose of using a well known concept in software to let the user know how much free space is available for recording programs.

Referring to claim 25, depending on claim 24, see rejection of claim 2.

Referring to claim 26, depending on claim 25, see rejection of claim 3.

Referring to claim 27, depending on claim 25, see rejection of claim 4.

Referring to claim 28, depending on claim 25, see rejection of claim 5.

Referring to claim 29, depending on claim 24, see rejection of claim 6.

Referring to claim 30, depending on claim 24, see rejection of claim 7.

Referring to claim 31, depending on claim 24, see rejection of claim 8.

Referring to claim 32, depending on claim 24, see rejection of claim 9.

Referring to claim 33, depending on claim 24, see rejection of claim 10.

Referring to claim 34, depending on claim 24, see rejection of claim 11.

Referring to claim 35, depending on claim 24, see rejection of claim 12.

Referring to claim 36, depending on claim 24, see rejection of claim 13.

Referring to claim 37, depending on claim 24, see rejection of claim 14.

Referring to claim 41, depending on claim 24, see rejection of claim 18.

Referring to claim 42, depending on claim 24, see rejection of claim 19.

Referring to claim 43, depending on claim 24, see rejection of claim 20.

Referring to claim 44, depending on claim 24, see rejection of claim 21.

Referring to claim 45, depending on claim 24, see rejection of claim 22.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17, 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne (WO 92/22983) in view of Sanna et al. (Using Windows NT Workstation 4.0) further in view of Hendricks (U.S. 5600573 B1).

Referring to claim 15, depending on claim 1, Browne teaches, wherein the processor is further configured with the logic to buffer digital media content instances (Page 14 lines 7-8 teaches a controller/processor element 105 in Figure 1 having memory and Page 7-8 teach a buffer), received at a communications interface (Figure 1 elements 101a-101h).

Browne and Sanna fail to teach the digital media-on-demand comes from a remote server, as digitally compressed media content instances.

In an analogous art Hendricks teaches digital media-on-demand comes from a remote server (Figure 1 element 202 and Column 9 lines 20-39), as digitally

Art Unit: 2623

compressed media content instances (Column 6 lines 44-67 teaches signals can be decompressed at the receivers set top terminal and MPEG which is digital).

At the time the invention was made it would have been obvious for one skilled in the art to modify the combined systems of Browne and Sanna with the delivery of video-on-demand function/device of Hendricks for the purpose of providing video on demand and other advanced television features (Column 4 lines 57-61).

Referring to claim 16, depending on claim 1, Browne teaches wherein the processor is further configured with the logic to buffer digital media content instances (Page 14 lines 7-8 teaches a controller/processor element 105 in Figure 1 having memory and Page 7-8 teach a buffer), received at a digital communications port, (Figure 1 elements 101a-101h).

Browne and Sanna fail to teach as digitally compressed media content instances received from a local network.

Hendricks teaches digitally compressed media content instances received from a local network (Column 6 lines 44-67 teaches signals can be decompressed at the receivers set top terminal and MPEG which is digital and Column 6 lines 15-27 and Figure 1 element 210 teaches a conventional concatenated cable system/local network).

At the time the invention was made it would have been obvious for one skilled in the art to modify the combined systems of Browne and Sanna using the local network of

Hendricks for the purpose of delivering the programs to the user and linking video on demand requests to an operations center (Column 9 lines 20-39, Hendricks).

Referring to claim 17, depending on claim 1, Browne teaches wherein the processor is further configured with the logic to buffer digital media content instances (Page 14 lines 7-8 teaches a controller/processor element 105 in Figure 1 having memory and Page 7-8 teach a buffer), received at a digital communications port, (Figure 1 elements 101a-101h).

Browne and Sanna fail to teach as digitally compressed media content instances received from a local device.

Hendricks teaches digitally compressed media content instances received from a local device (Column 6 lines 44-67 teaches signals can be decompressed at the receivers set top terminal and MPEG which is digital and Column 6 lines 15-27 and Figure 1 element 208 teaches a local device/head-end; Column 6 lines 15-30 and Column 9 lines 12-50 teach how the local device delivers programming to set top terminals).

Referring to claim 38, depending on claim 24, see rejection of claim 15.

Referring to claim 39, depending on claim 24, see rejection of claim 16.

Referring to claim 40, depending on claim 24, see rejection of claim 17.

Claims 23 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne (WO 92/22983) in view of Sanna et al. (Using Windows NT Workstation 4.0) further in view of Hendricks (U.S. 5600573 B1).

Referring to claim 23, see the combination of the rejection of claims 1-22.

Referring to claim 46, see the rejection of claims 24-45.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter C. Wilder whose telephone number is 571-272-2826. The examiner can normally be reached on 8 AM - 4PM Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571)272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PW



CHRISTOPHER GRANT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800